EVALUATION OF
THE JOB PLACEMENT PROGRAM
AND
THE TRAINING FOR JOBS PROGRAM

TECHNICAL APPENDIX

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PREFACE

The main report and the summary report present our findings on the impact of the Job Placement Program and the Training for Jobs Program. This Technical Appendix provides more detail on the method used to derive our estimates. It assumes the reader is very familiar with the details of the two programs.

Chapter One of this Appendix repeats some of the material in the other reports on the issues associated with selection of a suitable control group, an issue central to estimation of program impact.

We are particularly grateful to Rob Gage for his help in generating the information used to estimate program impact.

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CHAPTER ONE: BACKGROUND

THE NEED FOR A CONTROL GROUP

We cannot assume that everybody who achieves independence through JP or TFJ would have remained dependent on BCEA if they had not been accepted into an employment program. Therefore, to know a program's real impact on BCEA clients we need to estimate 'what otherwise would have occurred'. This is usually done by looking at the experience of a carefully selected 'control' group and using its experience with BCEA as the benchmark for the performance of program participants.

By comparing the performance of program participants with that of a control group we can estimate the incremental benefit that is attributable to the program. For example, if we find that members of the control group averaged 3 months of independence from BCEA during a 12 month period, but program participants averaged 4 months of independence during the same period, we can infer that the extra 1 month of independence is due to participation in the program. For this inference to be valid, however, the control group and the program participants should (ideally) be the same in every relevant way except for the fact that the control group did not attend the program.

Selection of a suitable control group is the most difficult and controversial issue associated with estimating program impact. Ideally, it would be useful to compare the experience of two **randomly** selected groups: one who would be program participants and one who would not. It is rare, however, to have random selection built into the design of social programs and this has not been the case with JP or TFJ. Therefore, a suitable control group must be identified in some other way.

In selecting a control group we have to standardise for as many potential causes of bias as we can identify. For example, we would want to select a control group that has the same demographic characteristics, the same employment history and the same BCEA experience and the persons referred to JP or TFJ. Many of these characteristics are known and can be used in identifying the control group. Ideally, we would also want to select a control group that faced similar life circumstances and had the same attitudes as those participating in JP or TFJ. For example, some people may be more motivated to find work than others and these people may be the ones who find work quickly. If the selected control group has fewer motivated people than the program group, the impact of the program will be **overstated** -- the difference in measured performance will due in part to the difference in motivation between the two groups.

Unfortunately, characteristics such as motivation are hard to identify and, therefore, difficult to incorporate into the selection of a control group. Nevertheless, we have to be aware of the potential bias that can arise from failure to correct for such differences.

In the case of JPthere are three points at which selection bias – where those selected to particpate in the program differ in an important way from those not selected -- could be introduced: referral by the Ministry, acceptance by the contractors and hiring by employers. At each of these points it is likely that the most employable persons will be selected, and the less employable, not selected. It is critical, therefore, to understand the potential bias that could be introduced by choosing control groups that differ from the JP groups we examined: those referred, those accepted and those hired (placed).

CONTROL GROUPS USED IN OUR ANALYSIS

We have examined program impact using four types of control group:

- **Similar persons who were on the caseload in a period before the program was initiated.** This group would not have been influenced by the program. They may have been influenced by other programs but if the selection criteria were different to those for JP or TFJ, the bias caused by other programs could be minimal. A more serious concern with using a control group from an earlier period is that fact that other influences on the pace at which BCEA clients become independent, such as Ministry policy, may also have changed. In fact, we know that Ministry policy has had a profound influence on the caseload since 2002. Therefore, using a control group drawn from an earlier period would create a bias in the estimated impact of JP2/X or TFJ, although it may be more acceptable for estimating the impact of JP1.
- **Similar persons on the current caseload that have not been referred to the programs.** These people are good candidates for a control group because they have not been influenced by the programs in any way. However, the process of referral is not random. If the more employable clients are referred to the program, selecting the control group from those not referred can create a bias.
- **Persons that have been referred to the program but not accepted.** This grouping overcomes the selection bias implicit in the referral process. However, because it is reasonable to assume that contractors select the more employable clients, the not-accepted group may be biased. This bias is moderated by the fact that the not-accepted group includes persons who were referred but did not show-up for interview, possibly because they had found employment on their own. This group may or may not be more employable than the accepted group. Therefore, including 'no-shows' improves the usefulness of the not-accepted group as a potential control group.
- **Persons that have been referred but not-placed.** We would expect placed persons to be more employable than those referred but not placed because these people have been selected both by contractors and by employers. At the same time, persons accepted but not-placed may actually benefit from the program even though they are not placed during the time that they are with the program. For both reasons, the not-placed group is likely to be a poor control group. However, inclusion of no-shows in the referred but not placed grouping improves its usefulness as a control group.

In practice, none of these control groups is perfect and we have used a variety of control groups to estimate program impact. Because it is not possible to remove all

sources of bias from the control groups, it is impossible to generate a precise measurement of program impact. We are, however, reasonably confident about the general magnitude of the impact estimated for JP2. It is too early in the program to be confident about the estimate derived for TFJ.

CONTROLLING FOR ATTACHMENT TO BCEA

The ETW caseload is composed of persons with varying degrees of 'attachment' to BCEA. This fact is illustrated by Exhibit 1.1 which summarises the ETW caseload using three categories that we have adopted for the purposes of this study:

- New (N): Those who did not receive assistance in any of the previous 12 months.
- Intermittent (I): Those who received assistance in some but not all of the previous 12 months.
- Persistent (P): Those who received assistance in each of the previous 12 months.

EXHIBIT 1.1
ETW CASELOAD BY INDICATOR OF ATTACHMENT

	Sept. 1998	Sept. 2000	Sept. 2002	Sept. 2003
New (N)	4%	4%	3%	5%
Intermittent (I)	47%	45%	39%	45%
Persistent (P)	49%	50%	58%	51%
Average months on BCEA	33.6	33.7	35.7	34.6
Number of ETW Cases	101,253	88,877	58,933	31,195

Note: The caseload figures are based on the Ministry's current definition of ETW.

As Exhibit 1.1 shows, a small proportion of the monthly caseload represents those who are New. These people may have received BCEA previously but not in the past year. It also shows that more than half the ETW caseload has been receiving assistance consistently for the past year. In 2002, the proportion of persons in the Persistent group increased because the number of persons coming onto BCEA declined significantly. In 2003, the proportions are similar to those in 2000 because of changes in the speed with which clients are leaving BCEA and reclassification of some clients out of the ETW category.

We can use the N, I and P categorization to show that the probability that a person will leave BCEA is associated with their recent experience on BCEA. If we consider each month that a client is not receiving income assistance as a month of independence

from BCEA, we can calculate the average months of independence earned by persons who were on BCEA in September 1998 at various points in time after that date. Exhibit 1.2 shows the average number of months of independence earned by an ETW client after 24 months is 8.8 months. However, New clients tend to earn considerably more months of independence than the average and Persistent clients considerably less. Because of these big differences, it is critically important that the procedure for estimating impact be standardized for differences in attachment to BCEA. The following Chapter explains how we have made this adjustment.

EXHIBIT 1.2
MONTHS OF INDEPENDENCE ACHIEVED BY CLIENTS ON THE SEPTEMBER 1998 ETW CASELOAD

	Average Months of Independence	
	After 12 months	After 24 months
New (N)	5.4	13.6
Intermittent (I)	4.4	11.2
Persistent (P)	2.1	6.1
Ave. of All	3.3	8.8

CONTROLLING FOR DEMOGRAPHIC FACTORS

While in principle we should adjust for differences in the demographic characteristics (e.g. family type and age) between program participants and the control group, we did not find the differences significant enough to warrant the adjustment. The only significant adjustment we have made is for attachment to BCEA.

CHAPTER TWO:
ESTIMATES OF PROGRAM IMPACT FOR JP1

INTRODUCTION

This Chapter presents three estimates of the impact of JP1. However, for reasons that will be explained, each is thought to overstate the true impact of the program because it has not been possible to correct for all the selection biases inherent in the program.

In this Chapter we use the estimates derived for the cohort of persons referred to JP1 in September 2000. We have prepared estimates for other JP1 cohorts and the results are broadly similar. Where we have used a control group of persons not-referred to JP, the individuals selected are those who were on the BCEA ETW caseload in September 2000 but who were never referred to JP prior to October 2003.[1]

We also estimated impact using a control group of persons who were on the ETW BCEA caseload in 1998 before the program started. The results using this control group are broadly similar to those presented here.

JP1 ESTIMATE #1
PERSONS REFERRED COMPARED TO PERSONS NOT-REFERRED

This estimate compares the performance of persons referred to JP1 in September 2000 to persons who were on the BCEA caseload in that month but were not-referred. Exhibit 2.1 summarises the estimate. The top part of the Exhibit shows the number of months of independence earned by different types of client after different periods of time. For example, persons who were referred to JP1 in September 2000 and were classified as New earned an average of 23.8 months of independence in the 36 months following the date of referral. The control group of persons classified as New who were not referred earned 22.4 months. Therefore, the program impact for each New referred client is 1.4 incremental months of independence.

The estimated per person impact is different for persons categorised as New, Intermittent and Persistent. This particular estimate suggests that the greatest incremental impact of the program is on Persistent clients. The Exhibit summarises the impact across all clients by presenting a weighted average based on the composition of referred clients. This estimate shows a significant positive program impact of 1.63 incremental months of independence per referred person.

[1] Our intention was to exclude anyone that may have benefited from participation in the program at an earlier or later date. The control group included over 50,000 cases.

The bottom part of the Exhibit takes the calculated impact per referred person and multiplies it by the number of referred persons to arrive at the total incremental months of independence generated for this cohort. The total impact is estimated at 3,775 incremental months of independence.

EXHIBIT 2.1
PERSONS REFERRED TO JP1 COMPARED TO PERSONS NOT-REFERRED

Ave Months of Independence Achieved Per Person				
Referred to JP1 in Sept 2000				
	N	I	P	Weighted Ave
After 12 months	5.39	4.20	2.30	4.35
After 24 months	13.93	11.63	7.36	11.82
After 36 months	23.79	20.80	14.90	20.99
Control - Sept 00 ETW Cohort – Persons Not referred to JP				
	N	I	P	Weighted Ave
After 12 months	5.18	4.20	1.94	4.20
After 24 months	13.11	10.99	6.04	10.98
After 36 months	22.40	19.43	12.12	19.36
Increment				
	N	I	P	Weighted Ave
After 12 months	0.21	0.00	0.36	0.15
After 24 months	0.82	0.65	1.32	0.84
After 36 months	1.40	1.38	2.77	1.63
Total Incremental Impact After 36 Months				
	N	I	P	Total
Number of Clients Referred	939	979	403	2,321
% of Total Referred Clients	40%	42%	17%	100%
Total Incremental Months of Independence Achieved	1,311	1,347	1,117	3,775

This Estimate is likely to **overstate** program impact because the Ministry intended to refer the more employable clients. Therefore, we would expect them to achieve greater success than other persons on the ETW caseload who were not referred. To some extent we have controlled for this difference by deriving a weighted average of three separate impact estimates for our three categories of attachment (N, I and P). However, it is also probable that other characteristics would have been used in making the decision to refer persons to JP1 that it not possible to control for. For example, only a small proportion of persons referred were from the Persistent category. In selecting these people, the Ministry would have referred only those clients that it considered suitable for the program. It is not surprising therefore, that this estimate suggests a large incremental impact per person for Persistent clients.

JP1 ESTIMATE #2:
PERSONS PLACED COMPARED TO PERSONS NOT REFERRED

This estimate compares the performance of persons referred to JP1 in September 2000 who were subsequently placed under the program to the performance of persons who were not referred to the program. Exhibit 2.2 summarises the results which suggest a significant positive impact of 4.67 incremental months of independence per placed person. Like Estimate #1, this estimate suggests that the biggest incremental impact per person is on Persistent clients.

EXHIBIT 2.2
PERSONS PLACED BY JP1 COMPARED TO PERSONS NOT REFERRED

Ave Months of Independence Achieved Per Person				
Persons Placed from the Sept 2000 JP1 Cohort				
	N	I	P	Weighted Ave
After 12 months	6.72	5.42	3.34	5.69
After 24 months	16.41	13.73	9.49	14.30
After 36 months	27.23	23.63	17.78	24.38
Control - Sept 00 ETW Cohort- Persons Not referred to JP				
	N	I	P	Weighted Ave
After 12 months	5.18	4.20	1.94	4.31
After 24 months	13.11	10.99	6.04	11.22
After 36 months	22.40	19.43	12.12	19.70
Increment				
	N	I	P	Weighted Ave
After 12 months	1.54	1.22	1.39	1.38
After 24 months	3.31	2.74	3.46	3.08
After 36 months	4.83	4.21	5.66	4.67
Total Incremental Impact After 36 Months				
	N	I	P	Total
Number of Clients Placed	261	265	83	609
% of Total Placed Clients	43%	44%	14%	100%
Total Incremental Months of Independence Achieved	1,261	1,115	470	2,845

The total estimated impact, however, is 2,845 incremental months of independence, which is lower than the total using Estimate #1. This confirms the suspicion that

Estimate #1 is overstated. Even those clients referred but who are not placed achieve more months of independence than the September 1998 control group. It is arguable that persons accepted but not placed by contractors in the period allowed by the program may still have benefited (at a later date) from the program; and that this may explain the performance of the not-placed group. The data available to us for JP1 did not allow us to investigate this possibility but we were able to examine the performance of all accepted persons for JP2, as will be seen in the next Chapter.

Although Estimate #2 may be an improvement over Estimate #1, it undoubtedly overstates the impact of the program because placed person have been through three processes of selection (referral, acceptance and hiring). Therefore, we would expect Placed persons, on average, to be more employable clients not referred to JP.

JP1 ESTIMATE #3: PERSONS PLACED COMPARED TO PERSONS REFERRED BUT NOT PLACED

This estimate compares the performance of persons referred to JP1 in September 2000 who were subsequently placed under the program to the performance of all persons from the same cohort who were referred but were not placed. Persons not-placed include 'no-shows', persons who were interviewed but not accepted by contractors and persons accepted who were not placed in the time available to contractors.

Exhibit 2.3 summarises the results which suggest a significant positive impact of 4.2 incremental months of independence per placed person. The estimated total impact is 2,572 incremental months of independence, which is slightly lower than the result under Estimate #2 and confirms our expectation that Estimate #2 is overstated.

By comparing the two groups used in Estimate #3, we are attempting to overcome any weakness in Estimates #1 and #2 attributable to the selection bias in the referral process. The difference in the estimates can be seen in the results for the Persistent category. Using the approach of Estimate #3, Persistent clients do not show the largest program impact. This confirms our suspicion that the referral bias was strongest for Persistent clients.

Unfortunately, this estimate does not overcome the potential biases that could be associated with the acceptance and hiring processes. To some extent this bias is diluted by the fact that the not-placed group includes persons who did not show-up for interview and therefore were not subject to the acceptance screening process. However, we cannot be sure that all the bias in the selection processes has been overcome and we expect Estimate #3 to overstate program impact. However, this is the best estimate that could be derived for JP1 and it is the one reported in the main report.

EXHIBIT 2.3
PERSONS PLACED BY JP1 COMPARED TO PERSONS REFERRED BUT NOT-PLACED

Ave Months of Independence Achieved Per Person				
Persons Placed from the Sept 2000 JP1 Cohort				
	N	I	P	Weighted Ave
After 12 months	6.7	5.4	3.3	5.7
After 24 months	16.4	13.7	9.5	14.3
After 36 months	27.2	23.6	17.8	24.4
Control - Persons Referred but Not Placed from the Sept 2000 JP1 Cohort				
	N	I	P	Weighted Ave
After 12 months	4.9	3.7	2.0	4.0
After 24 months	13.0	10.9	6.8	11.2
After 36 months	22.5	19.8	14.1	20.2
Increment				
	N	I	P	Weighted Ave
After 12 months	1.8	1.7	1.3	1.7
After 24 months	3.4	2.9	2.7	3.1
After 36 months	4.8	3.9	3.6	4.2
Total Incremental Impact After 36 Months				
	N	I	P	Total
Number of Clients Placed	261	265	83	609
% of Total Placed Clients	43%	44%	14%	100%
Total Incremental Months of Independence Achieved	1,241	1029	302	2,572

CHAPTER THREE: ESTIMATES OF PROGRAM IMPACT FOR JP2

INTRODUCTION

This Chapter presents five estimates of the impact of JP2. We have divided JP2 clients into 12 monthly cohorts based on their month of first referral to the program. We have tracked these clients in subsequent months to see if they were still on BCEA. Using this information, we have calculated the average months of independence earned to date in each of the months following the month of referral. We have amalgamated the results for each of the monthly referral cohorts into an average across all referral months.[2] Therefore, the results presented for JP2 are based on all months of referral and, as a result, they provide a large sample size and compensate for any differences in impact that may be attributable to seasonal influences.

As for JP1, our estimates for JP2 include comparisons to people on BCEA who were classified as ETW but who had not been referred to JP2. The cohort chosen was based on persons who were on BCEA in September 2002. Since the Ministry's policy starting in 2002 was to refer most ETW clients to JP, it is possible that there was less selection bias in the referral process under JP2 than under JP1. However, on this we cannot be sure. It is still possible that the characteristics of persons not referred to the program are different to those referred. This issue is discussed further in the later sections of the Chapter.

We have prepared estimates for the longest time period available to us at the time. This is either 19 months or 21 months depending on the control group used.

[2] The process of combining the months can be explained as follows: the referral month for each cohort is called month 0, the subsequent months are labelled #1, #2, #3 etc. For each of the twelve referral cohorts under JP2 we can calculate the months of independence earned in each of the months following the month of referral. The average number of months of independence in the third month after referral, therefore, is the weighted average of figures calculated for each of the monthly cohorts in the third month after referral.

JP2 ESTIMATE #1
PERSONS REFERRED COMPARED TO PERSONS NOT REFERRED

This estimate compares the performance of persons referred to JP2 to persons who were on the ETW caseload but were not referred to the program. Exhibit 3.1 summarises the estimate. The top part of the Exhibit shows the number of months of independence earned by different types of client after different periods of time. For example, persons who were referred to JP2 who were classified as New earned an average of 11.54 months of independence in the 19 months following the date of referral. The control group of persons who were not referred and were classified as New earned 10.8 months. Therefore, the estimated program impact for each New referred client is 0.74 incremental months of independence.

EXHIBIT 3.1
PERSONS REFERRED COMPARED TO PERSONS NOT REFERRED

Ave Months of Independence Achieved Per Person				
Persons Referred to JP2				
	N	I	P	Weighted Ave
After 12 months	6.24	5.12	3.13	4.60
After 19 months	11.54	9.58	6.43	8.79
Control - Persons Not Referred to JP2				
	N	I	P	Weighted Ave
After 12 months	6.00	5.20	3.10	4.57
After 19 months	10.80	9.60	6.10	8.52
Increment				
	N	I	P	Weighted Ave
After 12 months	0.24	-0.08	0.03	0.03
After 19 months	0.74	-0.02	0.33	0.27
Total Incremental Impact After 19 Months				
	N	I	P	Total
Number of Clients Referred	6,469	13,000	11,856	31,325
Per Cent of Total Referred	21%	42%	38%	100%
Total Number of Incremental Months Achieved	4,805	-279	3,927	8,453

The estimated per person impact is different for persons categorized as New, Intermittent and Persistent. The Exhibit summarises the impact across all clients by presenting a weighted average based on the composition of referred clients. This estimate shows a positive program impact of 0.27 incremental months of independence per referred person.

The bottom part of the Exhibit takes the calculated impact per referred person and multiplies it by the number of persons referred to JP2 to arrive at the total incremental months of independence generated for this cohort. The total impact is estimated at 8,453 incremental months of independence. The estimated impact after 19 months is significantly greater than after 12 months. The impact appears to be stronger for New and Persistent clients.

The small positive impact of 0.27 incremental months of independence per referred person. This estimate is much lower than the similar estimate for JP1 (see Exhibit 2.1). This difference may reflect the fact that persons referred to JP2 were a more representative cross-section of persons on the ETW caseload than persons referred to JP1. We cannot be sure about this point, however. It is probable that the persons not referred to JP2 are a mix of clients: some who left BCEA before they could be considered for JP; some who were considered unsuitable because they were not sufficiently employable and were, therefore, referred to other programs; some who were not eligible because of policy (e.g. waiting or EI benefits); and some who were considered suitable for independent job search. However, we do not know the exact mix. Therefore, we do not have a strong presumption whether clients not referred to JP2 should be considered more or less employable than those referred.

JP2 ESTIMATE #2: PERSONS ACCEPTED COMPARED TO PERSONS NOT REFERRED

This estimate compares the performance of persons referred to JP2 who were subsequently accepted by contractors to the performance of persons who were not referred to the program. Exhibit 3.2 summarises the results which suggest a small positive impact of 0.44 incremental months of independence per placed person. The estimated total impact is 8,873 incremental months of independence, which is very similar to result under Estimate #1. It suggests that the impact measured under Estimate #1 is that associated with persons accepted by contractors. As with Estimate #1, the estimated incremental impact increases over time and appears to be significant only for New and Persistent clients.

It is possible that this Estimate of program impact is biased because it simply reflects sensible selection by the contractors of the more employable clients. However, since Estimate #1 controls for that bias and since Estimates #1 and #2 are similar in scale, we can conclude that Estimate #2 is a reasonable estimate of program impact.

EXHIBIT 3.2
PERSONS ACCEPTED TO JP2 COMPARED TO PERSONS NOT REFERRED

Ave Months of Independence Achieved Per Person				
Persons Accepted to JP2				
	N	I	P	Weighted Ave
After 12 months	6.24	5.06	3.24	4.71
After 19 months	11.62	9.60	6.83	9.12
Control - Persons Not Referred				
	N	I	P	Weighted Ave
After 12 months	6.00	5.20	3.10	4.67
After 19 months	10.80	9.60	6.10	8.68
Increment				
	N	I	P	Weighted Ave
After 12 months	0.24	-0.14	0.14	0.04
After 19 months	0.82	0.00	0.73	0.44
Total Incremental Impact After 19 Months				
	N	I	P	Total
Number of Clients Accepted	4,688	8,553	6,876	20,117
Per Cent of Total	23%	43%	34%	100%
Total Number of Incremental Months Achieved	3,850	-22	5045	8,873

JP2 ESTIMATE #3: PERSONS PLACED COMPARED TO PERSONS NOT REFERRED

This estimate compares the performance of persons referred to JP2 who were accepted and placed by contractors to the performance of persons who were not referred to the program. Exhibit 3.3 summarises the results which suggest a positive program impact of 2.55 incremental months of independence per placed person and an estimated total impact of 24,744 incremental months of independence, which is much higher than the impact measured using Estimate #2. As with Estimate #2, the estimated incremental impact increases over time and, with this method of estimating, the impact is positive for all client groups.

It is very likely that Estimate #3 is biased because it reflects the fact that, out of the persons accepted, only the most motivated and employable persons find and keep work.

This is confirmed by our finding, not detailed here, that persons accepted but not-placed show far less independence than the control group of persons not-referred to the program.

EXHIBIT 3.3
PERSONS PLACED COMPARED TO PERSONS NOT REFERRED

Ave Months of Independence Achieved Per Person				
Persons Placed Through JP2				
	N	I	P	Weighted Ave
After 12 months	7.11	5.91	4.69	5.86
After 19 months	13.00	11.78	9.52	11.44
Control - Persons Not Referred				
	N	I	P	Weighted Ave
After 12 months	6.00	5.20	3.10	4.80
After 19 months	10.80	9.60	6.10	8.89
Increment				
	N	I	P	Weighted Ave
After 12 months	1.11	0.71	1.59	1.07
After 19 months	2.20	2.18	3.42	2.55
Total Incremental Impact After 19 Months				
	N	I	P	Total
Number of Clients Placed	2,516	4,371	2,833	9,720
Per Cent of Total	26%	45%	29%	100%
Total Number of Incremental Months Achieved	5,534	9,524	9,686	24,744

JP2 ESTIMATE #4
PERSONS ACCEPTED COMPARED TO PERSONS REFERRED BUT NOT ACCEPTED

This estimate compares the performance of persons accepted by contractors under JP2 to the performance of persons who were referred but not accepted to the program. Exhibit 3.4 summarises the results which suggest a small positive impact of 0.4 incremental months of independence per accepted person after 21 months. The estimated total impact is 7,996 incremental months of independence, which is similar to the impact

measured using Estimates #1 and #2 (although this impact for the earlier Estimates is after 19 months).

EXHIBIT 3.4
PERSONS ACCEPTED COMPARED TO PERSONS REFERRED BUT NOT ACCEPTED

Ave Months of Independence Achieved Per Person				
Persons Accepted Through JP2				
	N	I	P	Weighted Ave
After 12 months	6.24	5.06	3.24	4.71
After 21 months	13.24	10.96	8.00	10.48
Control - Persons Referred but not accepted				
	N	I	P	Weighted Ave
After 12 months	6.28	5.24	2.97	4.71
After 21 months	13.37	10.86	6.89	10.08
Increment				
	N	I	P	Weighted Ave
After 12 months	-0.04	-0.19	0.27	0.00
After 21 months	-0.12	0.11	1.11	0.40
Total Incremental Impact After 21 Months				
	N	I	P	Total
Number of Clients Accepted	4,688	8,553	6,876	20,117
Per Cent of Total	23%	43%	34%	100%
Total Number of Incremental Months Achieved	-567	902	7,661	7,996

As with other Estimates, the estimated incremental impact increases over time. However, using this estimating method, the impact is dominated by the positive impact on Persistent clients.

In general, we would expect those persons accepted to have greater success than those not-accepted because we expect contractors to select the more employable persons. However, not all of the persons referred show up for an interview with contractors. The referred but not accepted group includes these 'no-shows' as well as persons who were interviewed but not selected by the contractors. Therefore, we cannot presume that

persons accepted will achieve more independence than persons referred but not accepted.[3]

Since all of the persons considered in this method are those who were referred to the program, it should control for any bias associated with the referral process. Furthermore, since the estimated impact using this method is similar to that of Estimate #1, it is possible to conclude that there was very little bias in the referral process, which is in keeping with the change in policy in 2002 to refer most ETW clients to JP.

We have selected Estimate #4 as our preferred estimate of program impact because it does not have any obvious strong biases and is consistent with the impacts measured by Estimates #1 and #2. Estimate #4 is the one included the Evaluation reports to the Ministry.

JP2 ESTIMATE #5
PERSONS PLACED COMPARED TO PERSONS REFERRED BUT NOT PLACED

This estimate compares the performance of persons accepted and placed by contractors under JP2 to the performance of persons who were referred but not placed. Persons not-placed include 'no-shows', persons who were interviewed but not accepted by contractors and persons accepted who were not placed in the time available to contractors.

Exhibit 3.5 summarises the results which suggest a positive impact of 3.21 incremental months of independence per placed person. The estimated total impact is 31,212 incremental months of independence, which is approximately four times the impact measured using Estimates #1, #2 and #4. Like Estimate #3, this Estimate is likely to be overstated because the most motivated and employable persons can be expected to be placed.

Even though we consider this estimate biased, we have included it because it generates a similar estimate per placed person to that presented as Estimate #3 for JP1 (see impact after 24 months in Exhibit 2.3). The similarity confirms our belief that all the Estimates presented for JP1 considerably overstate the true impact of the program.

[3] When we look within the group of not-accepted persons, the 'no-shows' achieve far greater months of independence than those who are interviewed but not accepted.

EXHIBIT 3.5
PERSONS PLACED COMPARED TO PERSONS REFERRED BUT NOT PLACED

Ave Months of Independence Achieved Per Person				
Persons Placed Through JP2				
	N	I	P	Weighted Ave
After 12 months	7.11	5.91	4.69	5.86
After 21 months	14.72	12.55	11.02	12.66
Control - Persons Referred but not placed				
	N	I	P	Weighted Ave
After 12 months	5.53	4.65	2.59	4.28
After 21 months	11.96	10.02	6.35	9.45
Increment				
	N	I	P	Weighted Ave
After 12 months	1.58	1.25	2.10	1.58
After 21 months	2.75	2.53	4.67	3.21

Total Incremental Impact After 21 Months				
	N	I	P	Total
Number of Clients Placed	2,516	4,371	2,833	9,720
Per Cent of Total	26%	45%	29%	100%
Total Number of Incremental Months Achieved	6,929	11,044	13,239	31,212

ESTIMATING MINISTRY SAVINGS

Using the Estimates of program impact outlined in the previous sections, we can estimate savings in BCEA payment attributable to JP2. Exhibit 3.6 details the estimate of savings reported in the Evaluation reports. It calculates the average monthly BCEA payment that would be made to clients accepted to JP2 in any month that they were not independent. The average of $648 is based on the family type composition multiplied by the average payment to each family type. This figure is multiplied by the number of incremental months of independence estimated using Estimate #4 above to arrive at estimated Ministry savings to date of $5.18 million. These savings are estimated before deducting the costs incurred by the Ministry to run the program and to pay contractors for their services.

EXHIBIT 3.6
ESTIMATED MINISTRY SAVINGS IN BCEA PAYMENTS AFTER 21 MONTHS

Family Type	Per Cent of Total	Monthly BCEA Payment
- Singles	51%	$475
- Couple	7%	$750
- 2 parent family	11%	$962
- 1 parent family	32%	$772
Average Monthly Payment	100%	$648
JP2 Incremental Months of Independence using Est. #4		7,996
Estimated Savings After 21 months		$5.18 million

*Monthly benefit based on Sept 2003 actual payments for expected to work clients

PROJECTING FUTURE IMPACTS

Although we cannot know for certain whether the program impact will be sustained, we have good reason to believe that the benefits to the Ministry will continue to grow for some time. Exhibit 3.7 presents in more detail some of the results summarised in Exhibit 3.4. It shows the incremental impact for each category of accepted client (N, I and P) in each month after the month of referral. It also presents the weighted average for all clients. (Note: The figures also presented in Exhibit 3.4 are highlighted.)

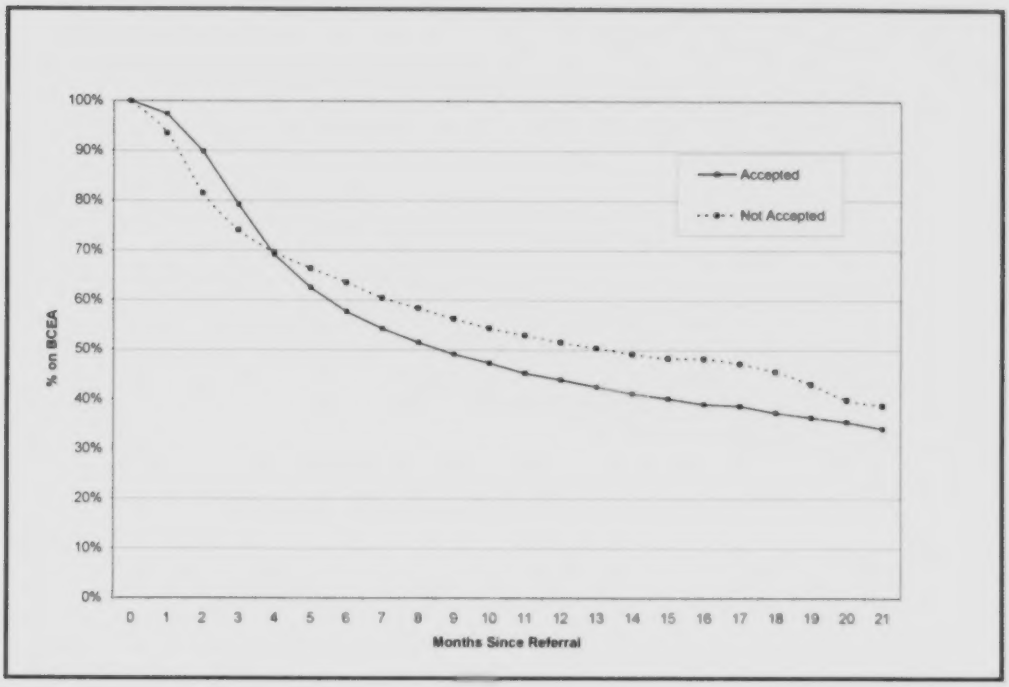
We can use Figure 3.7 to show that incremental months of independence earned by accepted persons is negative in the early months after referral. However, the negative effect bottoms out in month #5 and turns to a positive impact around month #12. In fact, the average impact has been growing with each passing month since month #5, as is shown in the final column of Exhibit 3.7. If this trend continues, the total incremental months of independence per accepted person will continue to increase by between 0.01 and 0.05 months each month (or 0.12 and 0.6 months each year). This would translate into additional savings in BCEA payments of between $1.5 and $7.5 million each year. In the main evaluation reports we have projected the breakeven point for the program based on the assumption that savings will continue to increase by $4.5 million per year.

EXHIBIT 3.7
AVERAGE INCREMENTAL MONTHS OF INDEPENDENCE PER ACCEPTED PERSON IN EACH MONTH FOLLOWING THE MONTH OF REFERRAL

	Ave Incremental Months of Independence Achieved Per Person				
Month Following Month of Referral	N	I	P	Weighted Average	Change in Weighted Average
1	-0.06	-0.06	-0.02	-0.05	-0.05
2	-0.20	-0.18	-0.09	-0.15	-0.11
3	-0.30	-0.28	-0.13	-0.23	-0.08
4	-0.33	-0.32	-0.13	-0.26	-0.02
5	-0.32	-0.32	-0.11	-0.25	0.01
6	-0.29	-0.31	-0.07	-0.22	0.03
7	-0.25	-0.30	-0.02	-0.19	0.03
8	-0.21	-0.28	0.02	-0.16	0.04
9	-0.17	-0.25	0.08	-0.12	0.04
10	-0.12	-0.24	0.14	-0.08	0.04
11	-0.07	-0.21	0.20	-0.04	0.04
12	-0.04	-0.19	0.27	0.00	0.04
13	-0.01	-0.16	0.35	0.05	0.04
14	0.00	-0.13	0.43	0.09	0.05
15	0.01	-0.09	0.52	0.14	0.05
16	0.02	-0.06	0.64	0.20	0.06
17	0.02	-0.02	0.75	0.25	0.05
18	0.02	0.01	0.86	0.30	0.05
19	0.00	0.04	0.96	0.34	0.04
20	-0.05	0.06	1.03	0.37	0.02
21	-0.12	0.11	1.11	0.40	0.03

Although we do not know for sure if the incremental impact of the program will be sustained over time, it is very likely that the incremental impact will continue to increase for at least another two or three years for two reasons. First, we know that that the incremental impact of JP1 has continued to increase. Second, it would take some months before the difference in performance between the accepted and not-accepted cohorts closed. The latter point is illustrated by the graphic in Exhibit 3.8 which shows the percentage of accepted and not-accepted persons clients still on BCEA in the months following the month of first referral. As can be seen, the gap between the two has been significant and consistent. Although the gap appears to be closing in the later months, it is likely that it would take some time for the curves to converge.

EXHIBIT 3.8
COMPARISON OF INDEPENDENCE ACHIEVED BY ACCEPTED AND NOT-ACCEPTED CLIENTS – JP2



CHAPTER FOUR: ESTIMATING PROGRAM IMPACT FOR TFJ

Unlike JP1 and JP2, experience to date with TFJ provides very little information on which to estimate the impact of the program. The program did not begin until December 2002 and, because of the time required for training, only a relatively short period of employment and independence experience is available for TFJ clients.

It is more difficult to develop multiple control groups for TFJ than it is for JP2. It would not be reasonable to use as a control group ETW clients who had not been referred to the program. Many of these people would have been referred to JP and would be considered more employable than persons referred to TFJ.

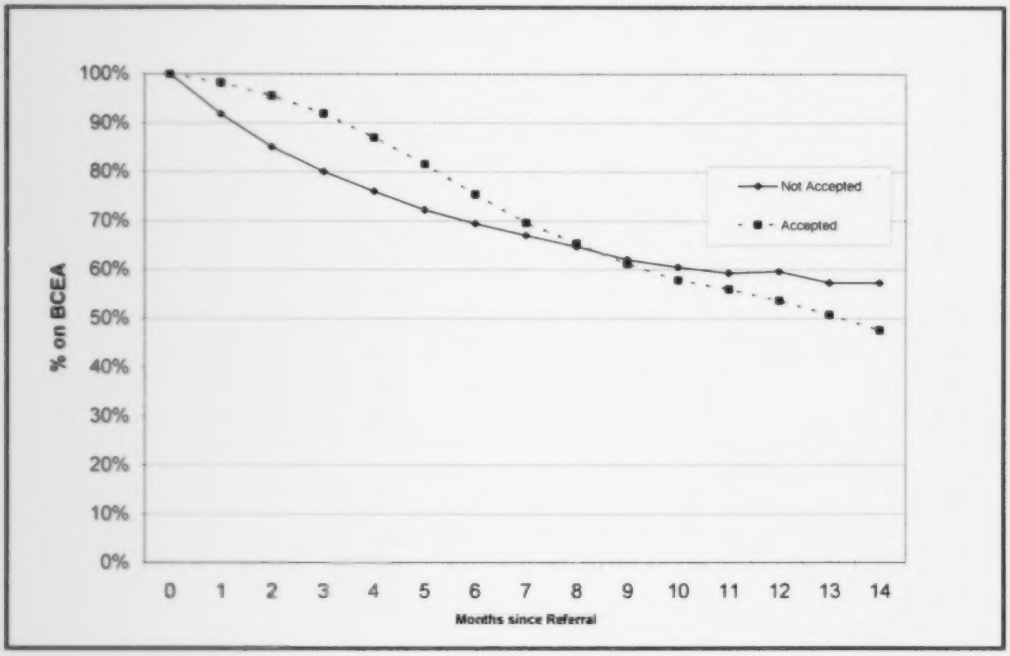
Therefore, we consider the most appropriate procedure for estimating program impact for TFJ is to compare the performance of persons accepted into the program to persons-not accepted. The composition of these two groups with respect to their attachment to BCEA was essentially the same, and therefore we did not need to control for the proportions of New, Intermittent and Persistent clients in each group.

In general, we would expect those persons accepted to have greater success than those not-accepted because we expect the contractors to select the more employable persons. However, not all of their persons referred show up for an interview with contractors. The referred but not accepted group includes these "no shows" as well as persons who were interviewed but not selected by the contractors. Therefore, we cannot presume that persons accepted will achieve more independence than persons referred but not accepted[4].

Exhibits 4.1 and 4.2 summarize the performance of the accepted and not-accepted groups. The graphic in Exhibit 4.1 shows the percentage of persons still on BCEA in the months following their referral to TFJ. Initially those not accepted to the program leave at a faster rate. This is to be expected as those accepted are involved in training during the first part of the program and are not available for job search. Beginning in the third month after referral accepted clients begin the leave BCEA at a faster rate, and by the ninth month the proportions of accepted and not-accepted who still remain on BCEA is essentially the same (just over 60% for both groups).

[4] When we look within the group of not-accepted persons, the "no-shows" achieve far greater months of independence that hose who are interviewed but not accepted.

EXHIBIT 4.1
COMPARISON OF INDEPENDENCE ACHIEVED BY ACCEPTED AND NOT-ACCEPTED CLIENTS



During the first nine months after referral more of the not-accepted group had left BCEA, and their average accumulated months of independence is higher than months accumulated by the accepted group. This is illustrated by Exhibit 4.2. Even after 14 months, the accepted group (with 4.09 months of independence per person) has not quite caught up to the not-accepted group (with 4.38 months of independence per person).

EXHIBIT 4.2
AVERAGE MONTHS OF INDEPENDENCE PER ACCEPTED AND NOT-ACCEPTED PERSON IN EACH MONTH FOLLOWING THE MONTH OF REFERRAL

	Ave Months of Independence Achieved Per Person			
Month Following Month of Referral	Not Accepted	Accepted	Increment	Change in Increment
1	0.08	0.02	-0.06	-0.06
2	0.23	0.06	-0.17	-0.10
3	0.43	0.14	-0.29	-0.12
4	0.67	0.27	-0.40	-0.11
5	0.95	0.46	-0.49	-0.09
6	1.26	0.71	-0.55	-0.06
7	1.59	1.01	-0.58	-0.03
8	1.94	1.36	-0.58	-0.01
9	2.32	1.75	-0.57	0.01
10	2.71	2.17	-0.55	0.03
11	3.12	2.61	-0.51	0.03
12	3.53	3.07	-0.46	0.06
13	3.95	3.56	-0.39	0.07
14	4.38	4.09	-0.29	0.10

The accepted group's accumulation of months of independence is increasing more quickly than that of the not-accepted group. This is illustrated by the final column of Exhibit 4.2 which shows the change in the incremental impact of the accepted group compared to the not-accepted group. If current trends continue it will not be long until accepted persons have earned more months of independence, per person, than those not-accepted. (This is the point at which the Ministry begins to achieve savings in BCEA payments attributable to the program).

Although the trends for TFJ are quite positive at present they have not yet stabilized and more experience is needed before a reasonable projection of cost savings can be made.